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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,289	12/15/2003	Po-Yuan Chen	CHEN3610/EM	1777
23364	7590	06/23/2004	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			LE, DANG D	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/734,289	Applicant(s) CHEN, PO-YUAN	
	Examiner Dang D Le	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country. It is Chinese application serial number 200320120835.8 filed on 11/07/03. The certified copy of Chinese application has not been received.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (5,121,017).

Regarding claim 1, Yamamoto et al. shows a stepper motor (Figures 2-3 and column 4), comprising:

- a housing (10) having a chamber therein, wherein the housing fame has an annular plate (12) and a bottom plate (16) coupled with the annular plate, and an included angle between the annular plate and the bottom plate set at ninety degrees;

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- A stator (26) having a space at a center thereof and wound coils on the stator to generate induced magnetic field in the space, wherein the stator has a circumference closely attached on the inner side of the annular plate of the housing frame;
- A rotor (28) received in the inner space of the stator to be driven for rotating by the induced magnetic field;
- A motor front-plate (14) which is mounted with a shaft (30), while shaft having a portion outside the housing and has a portion inside the chamber of the housing and coupled with the rotor is secured on the housing frame to close the chamber.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper et al. (4,884,333).

Regarding claim 1, Cooper et al. shows a stepper motor (Figures 2-3 and 6), comprising:

- a housing having a chamber therein, wherein the housing frame has an annular plate (70) and a bottom plate (46) coupled with the annular plate, and an included angle between the annular plate and the bottom plate set at ninety degrees;
- A stator (10) having a space at a center thereof and wound coils on the stator to generate induced magnetic field in the space, wherein the stator has a circumference closely attached on the inner side of the annular plate of the housing frame;

- A rotor (12) received in the inner space of the stator to be driven for rotating by the induced magnetic field;
- A motor front-plate (56) which is mounted with a shaft (16), while shaft having a portion outside the housing and has a portion inside the chamber of the housing and coupled with the rotor is secured on the housing frame to close the chamber.

Regarding claims 2-6, it is noted that Cooper et al. also shows all of the limitations of the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Iwata et al. (5,889,345).

Regarding claim 7, Cooper et al. shows all of the limitations of the claimed invention except for the plastic layer.

Iwata et al. shows the plastic layer (12) for the purpose of waterproofing.

Since Cooper et al. and Iwata et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a plastic layer as taught by Iwata et al. for the purpose discussed above.

Information on How to Contact USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/21/04

A handwritten signature in black ink, appearing to read 'Dang D Le', is written over a horizontal line.

**DANG LE
PRIMARY EXAMINER**